



Quality Changes the World



HEAVY DUTY FORKLIFT TRUCKS



SANY MARINE HEAVY INDUSTRY CO., LTD.
SANY Industrial Park, Gaolan Port Economic and Development Zone,
Zhuhai, Guangdong, China

Tel 0756-7266945 Service 4008 87 8318
Fax 0731-84031999-149 Consulting 4008 87 9318
Email sanyport@sany.com.cn

B03S2ENQAQ2-CP

Materials and specifications are subject to change without notice. Featured machines in photos may include additional equipment.
Copyright 2017 © SANY all rights reserved.

www.sanygroup.com

SANY HEAVY DUTY FORKLIFT TRUCKS

ACHIEVEMENT OF PROFESSIONAL QUALITY

**COMPREHENSIVE
PRODUCT SERIES**
01

SAFE AND RELIABLE
03

HIGH-EFFICIENCY
05

ENERGY-SAVING
07



COMPREHENSIVE PRODUCT SERIES

SANY Heavy-Duty Forklift Truck can not only handle large-tonnage cargo, but also support maintenance, discharge and installation of important equipment. When equipped with special accessories, it can also handle steel, stone, concrete, wood, 20' container, etc. This SANY Port Machinery self-developed Heavy-duty Forklift Truck is reliable and highly efficient with different series of products with hoisting capacity from 10 to 46 tons. Various attachments and masts are provided to meet customers' different requirements.

World class, No. 1 logistics equipment supplier in China

The following configurations are provided for free combination.

Customized manufacturing is also available:

Hoisting capacity: 10t-16t, 18t-25t, 28t-35t, 40t-46t

Mast: Standard whole view mast, Duplex full free lift mast, Triplex full free lift mast

Attachment: Fork, Coil ram, Clamp, Spreader, Truck frame handler, Bucket, PC prefabrication unit attachment



SAFE AND RELIABLE

Joint design of China and Germany, excellent quality

1 Cab Automatic Lock Technology

While under maintenance, the cab will be turned on one side. With inappropriate operation, accidents would happen. Cab of SANY Heavy-Duty Forklift Truck has the double protection of mechanical and hydraulic anti-rollover protection, effectively preventing accidental rollover.

2 Cargo Fall-off Protection Technology

The technology can automatically control the position of the attachment, preventing cargo fall in emergencies such as sudden brake or making a turn.

3 Automatic Braking Technology upon Reversing

Adopting technologies like laser scanning and graphic identification, the machine can precisely detect people or obstacles within the driving route and then brakes automatically to prevent accidents. It is highly intelligent with high safety.

4 Automatic Fire Extinguishing Technology

The pipeline network automatic fire extinguisher with strong spray can realize fire alarm, anti-flaming and fire extinction functions. The fireproof performance is steady and reliable.

5 Video system

Cameras installed on the mast which improve the view and reduces the blind spots.

6 Reliable Structure Design

Designed by China and Germany together, the equipment is assured to be highly reliable and endurable by adopting full-digit prototype design system, going through FEA, dynamics simulation analysis, as well as strict endurance and vibration tests.

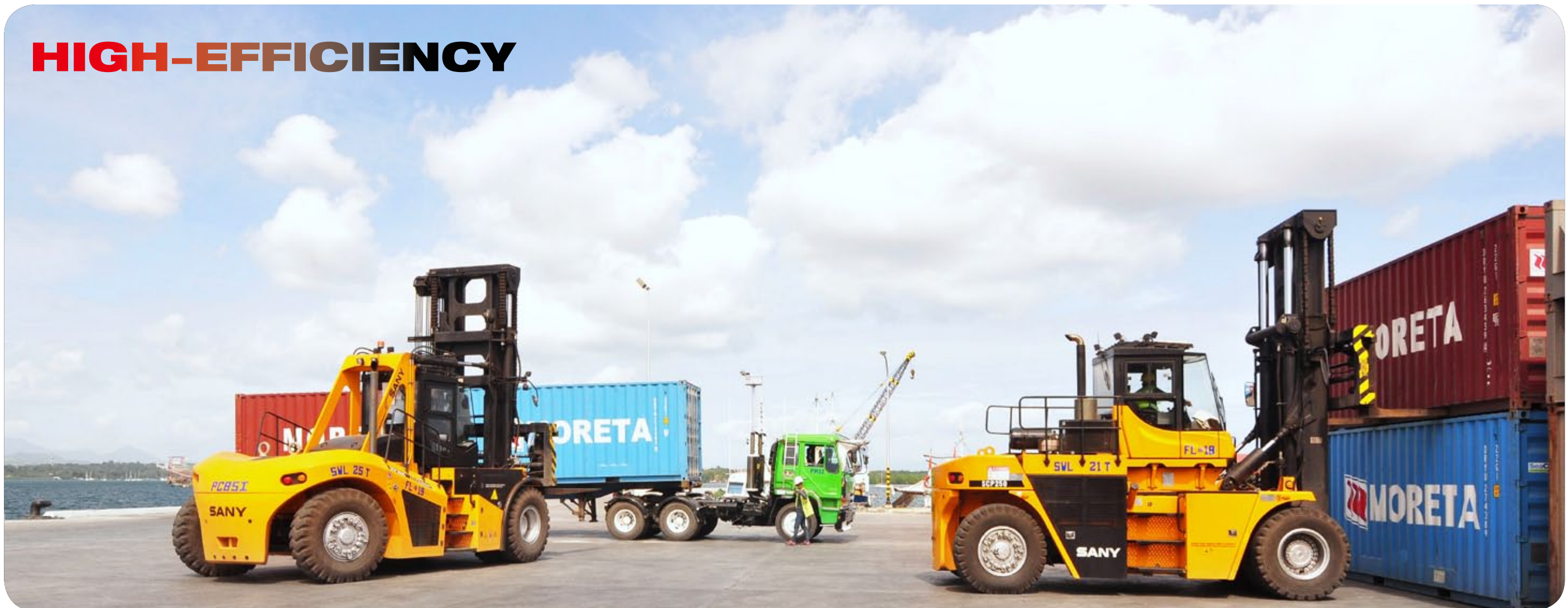
7 Reliable Power System

Using world famous brand engines like VOLVO and CUMMINS which are reliable in quality and strong in power, combining the advanced power matching and control technology, the equipment is greatly optimized in dynamic performance.

Scientific and appropriate protection for the engine and gearbox will significantly prolong their longevity.



HIGH-EFFICIENCY

**1**

Attachment Quick Change Technology

The attachment can be switched quickly, so as to realize efficient work under different working conditions.

2

Efficient Control Technology

The centralized joystick has inching control function. It can realize fine tuning to millimeter precision easily. All the attachments' motions are under proportional control, providing an experience of man-machine unification. The machine also has multi-motion linkage design so that it can operate faster and more efficiently.

3

Comfortable Operation Environment

The operator-oriented design includes a broad view of working condition. The controlling devices are placed in proper position to ease fatigue of operators.

4

Quick dismantling technology for counter balance weight

the counter balance weight adopts the pin fork fixation method. The counter balance weight is easy to dismantle. It is suitable for working condition that requires frequent hoisting from the ground to the cabin.

ENERGY-SAVING

1 Hydraulic Load Sensing System

The large tonnage forklift truck will automatically adjust the pump displacement according to the load, realizing high precision flow control. The effect of energy saving and consumption reduction are remarkable.

2 Dynamic Power Matching Control System

Automatically recognize dynamic power according to load change and adjust engine speed accordingly. The output power automatically accommodate to load and work conditions, greatly reducing energy consumption.

3 Design for Lighter

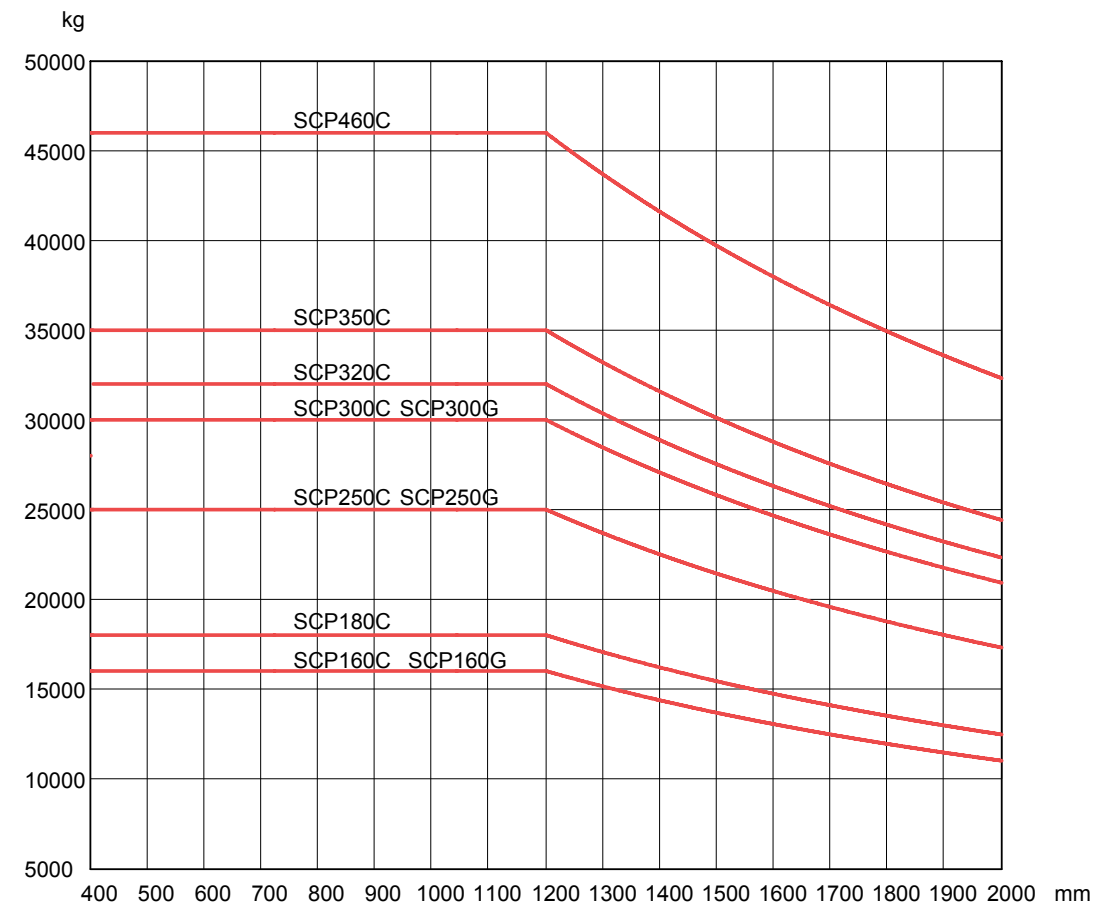
Optimize the structure to make it lighter and stronger.



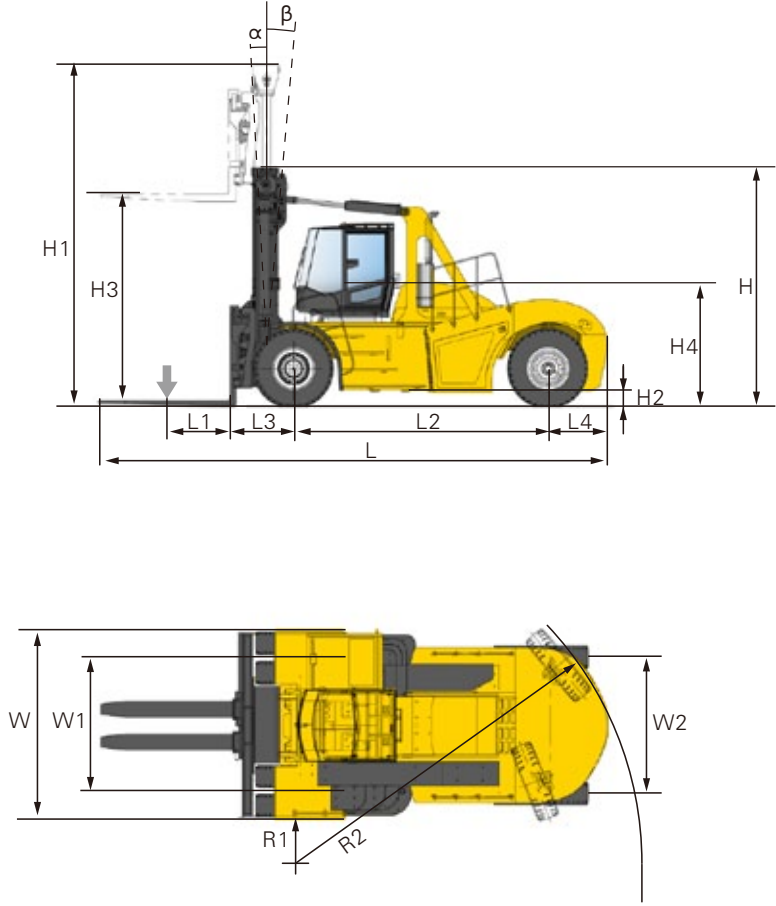
CONFIGURATION PARAMETERS

Parameter		16t			18t 25t			30t 32t 35t			46t	
Engine	Model	VOLVO	VOLVO	CUMMINS	CUMMINS	VOLVO	VOLVO	VOLVO	VOLVO	CUMMINS	VOLVO	CUMMINS
	Type	TAD552VE	TAD572VE	QSB6.7	QSB6.7	TAD851VE	TAD871VE	TAD851VE	TAD871VE	QSC8.3	TAD1151VE	QSM11
	Rated power (kW/rpm)	160/2200	160/2300	164/2300	164/2300	185/2200	185/2200	185/2200	185/2200	209/2200	265/2100	250/2100
	Max. torque (Nm/rpm)	910/1450	910/1450	949/1500	949/1500	1160/1350	1160/1200	1160/1350	1160/1200	1356/1500	1780/1260	1674/1400
	Exhaust standard	III Stage	IV Stage	III Stage	III Stage	III Stage	IV Stage	III Stage	IV Stage	III Stage	III Stage	III Stage
Gearbox	Type	DANA 13.7HR32000 SCP160G adopts DANA 340 TE17310			DANA 340 TE17312 SCP250G adopts DANA 340 TE17310			DANA 340 TE17312 SCP300G adopts DANA 340 TE17310			DANA 15.5HR36000	
Drive Axle	Type	KESSLER-D81 PL478			18t: KESSLER-D81 PL488 25t: KESSLER-D91 PL488			KESSLER-D91 PL408			KESSLER-D102 PL341	
Tyre	Dimension	12.00-24			14.00-24			16.00-25			18.00-25	

HEAVY-DUTY FORKLIFT LOAD CURVE GRAPH



DIMENSION MEASUREMENT IDENTIFIERS



TECHNICAL PARAMETER

Parameter		Unit	SCP160C Series	SCP160G	SCP180C Series	SCP250C Series	SCP250G
Performance parameters	Rated capacity	t	16	16	18	25	25
	Overall weight	kg	25500	25500	33100	36900	36120
	Max. lift speed (Load/No load)	mm/s	350/400	350/400	300/350	250/300	300/350
	Max. lowering speed (Load/No load)	mm/s	400/400	400/400	400/400	400/400	500/500
	Max. travel speed (Load/No load)	km/h	27/29	28/30	26/30	26/30	23/25
	Gradeability (Load)	%	33	33	34	29	32
Main parameters	Overall length L	mm	8070	8070	8580	8840	8840
	Overall width W	mm	2675	2675	3100	3100	3100
	Overall height H	mm	3760	3760	3850	3960	3960
	Load center L1	mm	1200	1200	1200	1200	1200
	Wheel base L2	mm	3750	3750	4050	4300	4300
	Overhang front L3	mm	1010	1010	1125	1136	1136
	Overhang rear L4	mm	910	910	1005	1005	1005
	Min. ground clearance H2	mm	330	330	330	330	330
	Truck height over seat height H4	mm	1910	1910	2040	2040	2040
	Inner turning radius R1	mm	460	460	940	940	940
	outer turning radius R2	mm	5100	5100	5750	6000	6000
	Front track width W1	mm	1898	1898	2225	2204	2204
	rear track width W2	mm	2120	2120	2450	2450	2450
Mast	Mast height (retracted H / extended H1)	mm	3760/5710	3760/5710	3850/5800	3960/5905	3960/5905
	Max. lift height H3	mm	4000	4000	4000	4000	4000
	Mast tilt (backward α /forward β)	deg	5/10	5/10	5/10	5/10	5/10
Fork	Fork dimensions	mm	2400×200×100	2400×200×100	2400×250×105	2400×250×110	2400×250×110
	Shift distance	mm	700~2310	700~2310	786~2776	786~2776	786~2776
	Application	-	20' ISO Containers/ Large-tonnage cargo				

TECHNICAL PARAMETER

Qualification		Unit	SCP300C Series	SCP300G	SCP320C Series	SCP350C Series	SCP460C Series
Performance parameters	Rated capacity	t	30	30	32	35	46
	Overall weight	kg	43100	43100	45200	46200	57900
	Max. lift speed (Load/No load)	mm/s	250/300	300/450	250/300	250/300	250/300
	Max. lowering speed (Load/No load)	mm/s	400/400	500/500	400/400	400/400	400/400
	Max. travel speed (Load/No load)	km/h	25/28	23/25	25/28	25/28	23/25
	Gradeability (Load)	%	25	26	24	23	30
Main parameters	Overall length L	mm	9190	9190	9530	9530	10400
	Overall width W	mm	3580	3580	3580	3580	4300
	Overall height H	mm	4380	4380	4380	4380	4505
	Load center L1	mm	1200	1200	1200	1200	1200
	Wheel base L2	mm	4500	4500	4800	4800	5500
	Overhang front L3	mm	1220	1220	1230	1230	1396
	Overhang rear L4	mm	1105	1105	1105	1105	1100
	Min. ground clearance H2	mm	315	315	315	315	430
	Truck height over seat height H4	mm	2195	2195	2195	2195	2360
	Inner turning radius R1	mm	780	780	930	930	1110
	outer turning radius R2	mm	6300	6300	6600	6600	7600
	Front track width W1	mm	2472	2472	2472	2472	3033
	rear track width W2	mm	2450	2450	2450	2450	2740
Mast	Mast height (retracted H / extended H1)	mm	4380/6325	4380/6325	4380/6325	4380/6325	4505/6435
	Max. lift height H3	mm	4000	4000	4000	4000	4000
	Mast tilt (backward α /forward β)	deg	5/10	5/10	5/10	5/10	5/10
Fork	Fork dimensions	mm	2400×300×110	2400×300×110	2400×300×125	2400×300×125	2400×300×140
	Shift distance	mm	920~2850	920~2850	920~2850	920~2850	1550~3150
	Application	-	20' ISO Containers Large-tonnage cargo		Large-tonnage cargo		

MAST OPTIONS

Mast type	Max. hoisting height (H)	Sloping angle (Front/ Rear)	Mast model	Mast height		Free lift height	Mast model	Mast height		Free lift height	Mast model	Mast height		Free lift height	Mast model	Mast height		Free lift height
				Min.height	Max.height			Min.height	Max.height			Min.height	Max.height			Min.height	Max.height	
			SCP160						SCP180~200					SCP220~250				SCP280~300
Standard mast	3000	5°/10°	MCPMS1630	3260	4710	—	MCPMS2030	3350	4800	—	MCPMS2530	3460	4905	—	—	—	—	—
	3500		MCPMS1635	3510	5210		MCPMS2035	3600	5300		MCPMS2535	3710	5405		—	—	—	
	4000		MCPMS1640	3760	5710		MCPMS2040	3850	5800		MCPMS2540	3960	5905		MCPMS3040	4360	6305	
	4500		MCPMS1645	4010	6210		MCPMS2045	4100	6300		MCPMS2545	4210	6405		MCPMS3045	4610	6805	
	5000		MCPMS1650	4260	6710		MCPMS2050	4350	6800		MCPMS2550	4460	6905		MCPMS3050	4860	7305	
	5500		MCPMS1655	4510	7210		MCPMS2055	4600	7300		MCPMS2555	4710	7405		MCPMS3055	5110	7805	
	6000		MCPMS1660	4760	7710		MCPMS2060	4850	7800		MCPMS2560	4960	7905		MCPMS3060	5360	8305	
	6500		MCPMS1665	5010	8210		MCPMS2065	5100	8300		MCPMS2565	5210	8405		MCPMS3065	5610	8805	
	7000		MCPMS1670	5260	8710		MCPMS2070	5350	8800		MCPMS2570	5460	8905		MCPMS3070	5860	9305	
Duplex full free lift mast	3000	5°/10°	MCPMD1630	3260	4710	1550	MCPMD2030	3450	4895	1500	MCPMD2530	3460	4910	1500	—	—	—	—
	3500		MCPMD1635	3510	5210	1800	MCPMD2035	3700	5395	1750	MCPMD2535	3710	5410	1750	—	—	—	—
	4000		MCPMD1640	3760	5710	2050	MCPMD2040	3950	5895	2000	MCPMD2540	3960	5910	2050	MCPMD3040	4280	6305	2050
	4500		MCPMD1645	4010	6210	2300	MCPMD2045	4200	6395	2250	MCPMD2545	4210	6410	2250	MCPMD3045	4530	6805	2300
	5000		MCPMD1650	4260	6710	2550	MCPMD2050	4450	6895	2500	MCPMD2550	4460	6910	2500	MCPMD3050	4780	7305	2550
	5500		MCPMD1655	4510	7210	2800	MCPMD2055	4700	7395	2750	MCPMD2555	4710	7410	2750	MCPMD3055	5030	7805	2800
	6000		MCPMD1660	4760	7710	3050	MCPMD2060	4950	7895	3000	MCPMD2560	4960	7910	3000	MCPMD3060	5280	8305	3050
	6500		MCPMD1665	5010	8210	3300	MCPMD2065	5200	8395	3250	MCPMD2565	5210	8410	3250	MCPMD3065	5530	8805	3300
	7000		MCPMD1670	5260	8710	3550	MCPMD2070	5450	8895	3500	MCPMD2570	5460	8910	3500	MCPMD3070	5780	9305	3550
Triplex full free lift mast	4500	5°/10°	MCPMT1645	3250	6130	1700	MCPMT2045	3300	6180	1700	MCPMT2545	3529	6430	1700	MCPMT3045	3700	6580	1700
	5000		MCPMT1650	3500	6630	1867	MCPMT2050	3467	6680	1867	MCPMT2550	3696	6930	1867	MCPMT3050	3867	7080	1867
	5500		MCPMT1655	3750	7130	2033	MCPMT2055	3633	7180	2033	MCPMT2555	3863	7430	2033	MCPMT3055	4033	7580	2033
	6000		MCPMT1660	4000	7630	2200	MCPMT2060	3800	7680	2200	MCPMT2560	4030	7930	2200	MCPMT3060	4200	8080	2200
	6500		MCPMT1665	4250	8130	2367	MCPMT2065	3967	8180	2367	MCPMT2565	4197	8430	2367	MCPMT3065	4367	8580	2367
	7000		MCPMT1670	4500	8630	2533	MCPMT2070	4133	8680	2533	MCPMT2570	4364	8930	2533	MCPMT3070	4533	9080	2533

MAST OPTIONS

Mast type	Max. hoisting height (H)	Sloping angle (Front/ Rear)	Mast model	Mast height		Free lift height	Mast model	Mast height		Free lift height	Mast model	Mast height		Free lift height
				Min.height	Max.height			Min.height	Max.height			Min.height	Max.height	
			SCP320~350						SCP380~400				SCP420~460	
Standard mast	3000	5°/10°	—	—	—	—	—	—	—	—	—	—	—	—
	3500		—	—	—		—	—	—		—			
	4000		MCPMS3540	4360	6305		MCPMS4040	4500	6430		MCPMS4640	4500	6430	
	4500		MCPMS3545	4610	6805		MCPMS4045	4750	6930		MCPMS4645	4750	6930	
	5000		MCPMS3550	4860	7305		MCPMS4050	5000	7430		MCPMS4650	5000	7430	
	5500		MCPMS3555	5110	7805		MCPMS4055	5250	7930		MCPMS4655	5250	7930	
	6000		MCPMS3560	5360	8305		MCPMS4060	5500	8430		MCPMS4660	5500	8430	
	6500		MCPMS3565	5610	8805		MCPMS4065	5750	8930		MCPMS4665	5750	8930	
	7000		MCPMS3570	5860	9305		MCPMS4070	6000	9430		MCPMS4670	6000	9430	
Duplex full free lift mast	3000	5°/10°	—	—	—	—	—	—	—	—	—	—	—	—
	3500		—	—	—	—	—	—	—	—	—	—	—	
	4000		MCPMD3540	4280	6305	2050	MCPMD4040	4500	6430	2050	MCPMD4640	4500	6430	2050
	4500		MCPMD3545	4530	6805	2300	MCPMD4045	4750	6930	2300	MCPMD4645	4750	6930	2300
	5000		MCPMD3550	4780	7305	2550	MCPMD4050	5000	7430	2550	MCPMD4650	5000	7430	2550
	5500		MCPMD3555	5030	7805	2800	MCPMD4055	5250	7930	2800	MCPMD4655	5250	7930	2800
	6000		MCPMD3560	5280	8305	3050	MCPMD4060	5500	8430	3050	MCPMD4660	5500	8430	3050
	6500		MCPMD3565	5530	8805	3300	MCPMD4065	5750	8930	3300	MCPMD4665	5750	8930	3300
	7000		MCPMD3570	5780	9305	3550	MCPMD4070	6000	9430	3550	MCPMD4670	6000	9430	3550
Triplex full free lift mast	4500	5°/10°	MCPMT3545	3700	6580	1700	MCPMT4045	3800	6680	1700	MCPMT4645	3800	6680	1700
	5000		MCPMT3550	3867	7080	1867	MCPMT4050	3967	7180	1867	MCPMT4650	3967	7180	1867
	5500		MCPMT3555	4033	7580	2033	MCPMT4055	4133	7680	2033	MCPMT4655	4133	7680	2033
	6000		MCPMT3560	4200	8080	2200	MCPMT4060	4300	8180	2200	MCPMT4660	4300	8180	2200
	6500		MCPMT3565	4367	8580	2367	MCPMT4065	4467	8680	2367	MCPMT4665	4467	8680	2367
	7000		MCPMT3570	4533	9080	2533	MCPMT4070	4633	9180	2533	MCPMT4670	4633	9180	2533

Standard mast

- Meet ordinary work condition requirement
- With mast lifting buffer position limitation protection technology
- Mast chain monitoring protection technology



Duplex full free lift mast

- Suitable for narrow place like ship cabin
- Good view with free lift range exceeding 2000mm



Triplex full free lift mast

- Separate lift for low position cargo; equipment height is lowered by 20%; mast center of gravity lowered by 10%; safer operation.



ATTACHMENT OPTIONS

	Fork Rated capacity: 16t/ 18t/ 25t/ 30t/ 32t/ 35t/ 46t Application: Large-tonnage cargo or bulk cargo Main frame color: Engineering black
	Clamp Rated capacity: 16t/ 18t/ 25t/ 30t/ 32t/ 35t/ 46t Application: Wood Main frame color: Engineering black
	Coil ram Rated capacity: 16t/ 18t/ 25t/ 30t/ 32t/ 35t/ 46t Application: Curly cargo such as steel coil, steel wire coil, etc Main frame color: Engineering black
	Container Spreader Rated capacity: 9t Application: ISO 20'/40' Containers Main frame color: Engineering black
	Truck frame handler Rated capacity: 4.5t Application: Chassis Main frame color: Engineering black
	PC prefabrication unit attachment Rated capacity: 16t Application: PC prefabrication unit Main frame color: Engineering black

ADD-ON OPTIONS

FUNCTION	BRAND	CODE	NOTE
Heat preservation device for extremely cold district	SANY	13815317	It is mainly used in such extremely cold district as Russia. It is recommended for district where the temperature is below -15℃ like North America, Russia and Europe. It is a must for district where the temperature is below -30℃.
Engine timer (by hour)	SANY	11446498	Timer for the engine's working hours
Amplifying alarm system	SANY	11447670	Including the amplifier and the alarm
Heavy-duty Forklift Truck LED lamp	SANY	13526557	Including: headlamp, rear lamp, mast working indicating lamp, tail lamp, steering lamp, alarm lamp and cab top working lamp; all are LED lamp.
Rear counterweight alarm lamp	SANY	11447452	One alarm lamp for the rear counterweight
Cab reading lamp	SANY	11447665	Hella fluorescent lamp, installed on the top of the cab.
12V power supply	SANY	11446544	Provide 12V power interface (on the top of the electric control cabinet in the cab)
24V power supply	SANY	11447574	Provide 24V power interface (on the top of the electric control cabinet in the cab)
3m range reversing radar system	SANY	13515506	Visible reversing radar with 3m range sensor
Steering horn	SANY	60231261	Adding sound reminding function
Radio	SANY	60006478	Including radio, horn and antenna.
Standard 16T coil ram	SANY	13407165	For steel coil
Standard 20~25T coil ram	SANY	13444243	For steel coil
Standard 30~35T coil ram	SANY	13404846	For steel coil
Mast video monitoring system	SANY	13520946	For improving the front view

CONSTRUCTION CASES

Mexico



Port of Tianjin



Philippine



Taicang Port, Jiangsu



Shanghai



USA



Port of Singapore



Guatemala



Dammam, Saudi Arabia



SERVICE



Quality Changes the World Service Creates value



After-sales Service Hotline:

4008 87 8318

Consultation/Complaints Hotline:

4008 87 9318

Service Concept

All for customers, creating value for customers.

Service Strategy

Build unparalleled service; realize "First Brand of Global Service" of Port Machinery.

Service Advantages

SANY has offices in over 200 countries and regions, with 30 agents in China, about 50 repair factories and 6S stores, over 3000 elite service engineers, 1000 offices and parts warehouse accommodating 100,000 kinds of parts worth more than RMB 600 million. We also have highly efficient logistics system by air, sea and land, which can transport genuine parts at any time.

Industry leading Enterprise Control Center (ECC): running for more than ten years, the ECC, as the industry initiative, is worth over RMB 30 million. It can realize real-time supervision and remote precision troubleshooting. With information promoting industrialization, it innovatively created SANY's service system of "Unity of man and heaven, synergy among 1st, 2nd and 3rd levels".

GCP, GPS and CSM system: customers can learn the working conditions & key work parameters through SANY's global portal and realize remote supervision. The system also supports parts and service search, providing convenient all-round equipment supervision.

